ABSTRACT

An assay system and methods are described where patient samples containing genomic DNA are analyzed for the presence of known genetic polymorphisms using a universal reporter strategy. In a preferred embodiment, the amplified DNA is localized at test sites in an array of sites on a microchip followed by a series of hybridization reactions that screen for the presence of a single mutation from among a number of mutations, and allow the identification of specific mutations. In addition to universal reporters, the assay may use blockers and discriminators for screening and identification of known polymorphisms.